



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,169	07/22/2005	Jouko Muona	014975-122	5477
55694 7590 12/12/2007 DRINKER BIDDLE & REATH (DC) 1500 K STREET, N.W. SUITE 1100 WASHINGTON, DC 20005-1209			EXAMINER WEEKS, GLORIA R	
			ART UNIT 3721	PAPER NUMBER
			MAIL DATE 12/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/543,169

Applicant(s)

MUONA ET AL.

Examiner

Gloria R. Weeks

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Salmi et al. (USPN 4,369,848).

In reference to claims 1-15, Salmi et al. discloses a hydraulic system and method of operating a hydraulic system, comprising: a common tank 30; and a plurality of hydraulic circuits (striking circuit; rotation circuit; feed circuit) having pressure fluid channels, each hydraulic circuit having a hydraulic pump 6, 10, 20 generating power to each hydraulic circuit; at least one power unit that actuate each hydraulic pump 6, 10, 20; at least one hydraulic mining actuator 1, 3 connected to the hydraulic circuit (striking circuit); at least one hydraulic auxiliary actuator 4 connected to the hydraulic circuit; means 9 for adjusting the hydraulic power to the percussion mining actuator 1, 3, wherein a main hydraulic circuit (striking circuit) and at least one separate hydraulic circuit (rotation circuit) are connected 14, 15 yet powered by separate pumps 6, 10, such that the power of the mining actuator 1, 3 is arranged to be adjusted by adjusting means 17 in connection with the pump 10, for the purpose of adjusting the hydraulic power, speed (column 1 lines 33-61), or flow generated by the pump 10 of the separate hydraulic circuit (column 2 lines 47-50).

3. Claims 1-7 and 10-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Saha et al. (USPN 6,938,702).

In reference to claims 1-7 and 10-18, Saha et al. discloses a hydraulic system and method of operating a hydraulic system, comprising: a plurality of hydraulic circuits (impact circuit; rotation circuit; feed circuit) having pressure fluid channels, each hydraulic circuit having a hydraulic pump 12-14 generating power to each hydraulic circuit; at least one power unit 12a, 13a, 14a that actuate each hydraulic pump 6, 10, 20; at least one hydraulic mining actuator 4 connected to the hydraulic circuit (impact circuit); at least one hydraulic auxiliary actuator 5 connected to the hydraulic circuit; means 28 for adjusting the hydraulic power to the impact mining actuator 4, wherein a main hydraulic circuit (impact) and at least one separate hydraulic circuit (rotation) are connected 3, 28 yet powered by separate pumps 13, 14 such that the power of the mining actuator 4 is arranged to be adjusted by adjusting means 28 in connection with the pump 13, in response to pressure sensing means 23-26, for the purpose of adjusting the hydraulic pressure, (which leads to calculation of power, force, and variables depicting the same) generated by the pump 10 of the separate hydraulic circuit (column 6 line 53-column 7 line 43) according to an adjustment strategy (figures 4 & 6).

Response to Arguments

4. Applicant's arguments filed September 14, 2007 have been fully considered but they are not persuasive.

5. During patent examination of the claims, the pending claims must be given their broadest reasonable interpretation consistent with the specification.¹ Moreover, while the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims,

¹ *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005). See also MPEP § 2111.

Art Unit: 3721

this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow.²

Applicant has argued that the hydraulic circuits of Salmi et al. are not separate from each other since the hydraulic circuits are interdependent. While the circuits are co-dependent in their operation, the circuits are, nonetheless, distinguishable from one another in that each respective circuit has a distinct configuration for the purpose of operating a distinct component of the hydraulic system. Thus, the hydraulic circuits are deemed separate³.

6. Applicant also argues that Salmi et al. fails to disclose or suggest a power control wherein power of the mining actuator is adjusted by adjusting the hydraulic power generated by the hydraulic pump. Examiner agrees that valves of the hydraulic contribute to the power adjustment of the mining actuator. Examiner has interpreted the pressure or power generated by the hydraulic pump to be the pressure received in the respective pressure line. Therefore, adjustment of the pressure in the pressure line by the valve (17) is deemed to be adjustment of the power generated by the hydraulic pump.

7. Applicant's arguments with respect to claims 16-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

² *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004). See also MPEP § 2111.01.

Art Unit: 3721

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gloria R. Weeks whose telephone number is (571) 272-4473. The examiner can normally be reached on M-F 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

³ To differentiate or discriminate between; distinguish (American Heritage Dictionary)

Art Unit: 3721


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Other helpful telephone numbers are listed for applicant's benefit:

- Allowed Files & Publication (888) 786-0101
- Assignment Branch (800) 972-6382
- Certificates of Correction (703) 305-8309
- Fee Questions (571) 272-6400
- Inventor Assistance Center (800) PTO-9199
- Petitions/special Programs (571) 272-3282
- Information Help line 1-800-786-9199

Gloria R. Weeks
Examiner
Art Unit 3721

/GRW/
December 9, 2007


Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700